

**BY ORDER OF THE COMMANDER
AIR EDUCATION AND TRAINING
COMMAND**

**AIR EDUCATION AND TRAINING
COMMAND INSTRUCTION 21-103**

5 OCTOBER 2012



Maintenance

**AETC MILITARY AIRCRAFT
MAINTENANCE TRAINING PROGRAM**

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ACCESSIBILITY: Publications and forms are available on the e-publishing website at www.e-publishing.af.mil for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: HQ AETC/A4MMR

Certified by: HQ AETC/A4M (Mr. John
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Pages: 51

Supersedes: AETCI 21-103, 15 February
2008

This publication implements AFPD 21-1, *Air and Space Maintenance*, 25 February 2003. It establishes objectives, standards, procedures, and responsibilities for management of the AETC military aircraft maintenance training programs. It also directs the use of the instructional system development (ISD) process to develop and validate training programs. This publication applies to all officers, enlisted, and civil service personnel who plan, conduct, administer, evaluate and manage AETC military aircraft maintenance training programs. Chapter 3 applies to AETC Contracting Office Representatives (COR). This publication does not apply to the Air National Guard and the Air Force Reserve Command and their units, the Inter-American Air Forces Academy (IAAFA), AETC technical training wings/ groups, civil service aircraft maintenance (CSAM) organizations, or contractor aircraft/trainer maintenance (CAM) operations. Submit recommendations for change, improvement, or waivers to this instruction on AETC Form 1236, *Request for Improving/Changing AETC Maintenance Publications*. Recommended changes must be approved by the group commander (or squadron commander, if not assigned to a group) before forwarding to HQ AETC/A4M, 555 E Street East, Randolph AFB TX 78150-4440, for action by HQ AETC/A4MMR. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not

imply endorsement by the Air Force. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed. Removed all Maintenance Officer Orientation Training Program (MOOTP) guidance in lieu of CFETP requirements, added a requirement to include a formal training forecast in the status of training briefing, added Training Business Area (TBA) guidance, and added initial skill training procedures as required by AFI 36-2201.

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Chapter 1

GENERAL

1.1. Objective. The objective of this instruction is to establish aircraft maintenance training policy and procedures for military aircraft and munitions maintenance organizations.

1.2. Terminology. When using this instruction, the following applies:

1.2.1. *Must* – Indicates a mandatory requirement.

1.2.2. *Will* – Indicates a mandatory requirement.

1.2.3. *Should* – Indicates a preferred or recommended method or option.

1.2.4. *May* – Indicates an acceptable or satisfactory method or option.

1.3. Maintenance Training Flight (MTF). Refer to AFI 36-2232, *Maintenance Training*, for MTF organizational structure and responsibilities.

1.4. Security Assistance Training Program (SATP). International students receive aircraft and support equipment task, and familiarization training at AETC units. Typically, training requirement dates and lengths of instruction cannot be easily changed; therefore, accomplish adequate preparation and course planning prior to the student's arrival. The following SATP management responsibilities apply:

1.4.1. The Air Force Security Assistance Training Squadron originates the training request and forwards it to HQ AETC/A4MMR for action/training support.

1.4.2. HQ AETC/A4MMR identifies the specific unit to conduct the training, and coordinates with the MTF to determine their capability to support the tasking. Once the MTF verifies it can support the tasking, it provides information to the unit about the student, and a list of specific requested training requirements.

1.4.3. Training provided will usually be to the "B" or "2b" level. See the proficiency code key at [Attachment 2](#).

1.4.4. The base international military student officer is responsible for student administration and coordination of student activities.

1.4.5. Since international students may not possess security clearances, take precautions to ensure they are not exposed to classified material/equipment.

1.5. Maintenance Orientation Training. The MTF will:

1.5.1. Schedule all personnel assigned to the MXG to attend an MTF-conducted maintenance orientation course within 60 days of arrival in the workcenter.

1.5.2. Develop the maintenance orientation to consolidate maintenance training requirements into one or more consecutive training sessions.

1.6. Air Force Engineering and Technical Services (AFETS), Contractor Engineering and Technical Services (CETS), and/or Field Service Representatives (FSR):

1.6.1. Use AFETS, CETS, and/or FSR personnel to conduct specialized systems/equipment training, and integrate them within the MTF instructional effort.

1.6.2. Coordinate courses developed or taught by AFETS, CETS, and/or FSR personnel through the MTF to ensure courses meet curriculum standards.

1.7. Aerospace Ground Equipment (AGE) Training Program. Conduct AGE training in accordance with AFI 21-101, *Aircraft and Equipment Maintenance Management*. Operation of powered AGE, by model and type, requires initial qualification training and a practical evaluation by AGE personnel. Upon assignment to the unit, non-AGE personnel who are required to operate AGE must receive initial qualification training. Previous qualifications require a supervisory evaluation during the initial evaluation process. During this evaluation, the supervisor determines whether the individual is still qualified to operate the required equipment or if refresher training is needed. Only designated personnel are authorized to conduct initial and refresher training.

1.8. AFTO Forms 781 Documentation. The MTF will develop and administer an AFTO Form 781 documentation training program for all aircraft maintenance personnel. (AFTO Form 781 is prescribed by TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*. Refer to that publication for guidance on filling out the form.) Include, as a minimum, maintenance documentation procedures, types of discrepancies constituting grounding of aircraft, procedures for clearing discrepancies, and in-process inspection requirements and procedures. Emphasize the importance of individual maintenance, and include automated forms and their use. Document completion of the training in the maintenance information system (MIS).

1.9. Civilian/Contractor Training. Procedures to procure training for civil service employees and contractor personnel are outlined in the Education and Training Course Advisory (ETCA) located at [https:// etca.randolph.af.mil](https://etca.randolph.af.mil).

1.10. Major Command (MAJCOM) Mandatory Course Listing (MMCL). Each MAJCOM has determined mandatory courses for each mission design series (MDS) by establishing the MMCLs. The purpose of the MMCLs is to ensure that all military personnel assigned to a specific MDS receive the same training and have the same training requirements throughout the Air Force. AETC units will comply with the lead command MDS MMCL for each assigned aircraft. Exception: 314 MXG personnel do not have to complete AMC required Maintenance Qualification Training Program (MQTP) courses. If no lead command MMCL has been published, HQ AETC/A4M will develop one. The MTF will administer the MMCL program according to AFI 36-2232.

1.11. Ground Instructional Training Aircraft (GITA). Units desiring an increase or decrease in assigned GITA will send their request to HQ AETC/A4MMR with required rationale and justification. HQ AETC/A4MMR will coordinate the request with the HQ AETC Aerospace Vehicle Distribution Office and the applicable weapon system manager.

1.12. Self-Inspection Program. The MTF will establish and implement an MTF self-inspection program and conduct self-inspections at least annually.

1.13. AETC Form 666, *Change to Inspector/Special Certification Listing*. Units may use AETC Form 666 or AF Form 2426 to add personnel to the special certification roster (SCR). These forms may also be used to remove personnel from the SCR.

1.14. Status of Training (SOT) Briefing. The MTF will prepare a monthly SOT briefing according to AFI 36-2232. Provide to HQ AETC/A4MMR monthly. In addition to Air Force

prescribed SOT contents, MTFs will also report lost training time (in hours), the status of maintenance officer training, and will include a 90-day formal training forecast slide to include all formal maintenance training allocations for the set timeframe (by course number & name), class start date, personnel loaded to each class (or non-utilized), TLN, funding status (unit or AETC), and date of student notification.

1.15. Initial Skill AFSC Multi-Phased Training Procedures. The following initial skill training procedures are established IAW AFI 36-2201.

1.15.1. The MXG/CC will establish procedures to provide for the supervision and employment of trainees before they enter Phase II training and for all available time beyond the normal TD training day during Phase II training.

1.15.2. The MXG/CC will establish procedures to ensure aircraft/equipment in support of Phase II Task Oriented Training (TOT).

1.15.3. The HQ AETC/A4MMR training manager is designated as the functional training manager to coordinate with the 982 TRG in determining short-term management actions to train Phase II backlogs.

1.15.4. The MXG/CC will ensure the appropriate AETC training organization provides the personal retention items and organizational equipment needed for Phase II training.

1.15.5. The MXG/CC will establish procedures to ensure that units involved in multiphase training programs provide TOT augmentees as agreed upon between HQ AETC and MAJCOMs.

Chapter 2

RESPONSIBILITIES AND REQUIREMENTS

2.1. Commanders. Commanders will:

- 2.1.1. Ensure an effective training program is established according to AFI 21-101; AFI 36-2201, AFI 36-2232; and this instruction.
- 2.1.2. Ensure on time completion of all training requirements.

2.2. Work Center Supervisor. The workcenter supervisor will:

- 2.2.1. Notify the unit training manager (UTM) which tasks constitute the workcenter training requirements listing.
- 2.2.2. Load a workcenter training requirement when the majority (51 percent or more) of personnel in the workcenter perform/require the task. Note: Individually required items do not have to be loaded (i.e. Air Force Training Course (AFTC), FTDs required by MMCL) to MIS workcenter requirements listing. Instead, these items may be added to applicable individuals when they become required (i.e. appt as OJT trainer, FTD course(s) required by MMCL, etc.).
- 2.2.3. Ensure training requirements that apply to selected personnel are individually loaded against them in the MIS.
- 2.2.4. Ensure personnel who require training are properly identified, scheduled, and released for training, and training is completed on time.
- 2.2.5. Ensure a workcenter training monitor (WTM) is appointed, trained, and accomplishes assigned duties and responsibilities.

2.3. Workcenter Training Monitor. The WTM will:

- 2.3.1. Assist supervisors in identifying and projecting training requirements, and managing the workcenter's training program.
- 2.3.2. Serve as the workcenter's single point of contact for training.
- 2.3.3. Coordinate with the UTM/MTF as necessary.
- 2.3.4. Attend training meetings conducted by the UTM/MTF.
- 2.3.5. Update (when authorized) training related actions in MIS at least weekly.

2.4. Noncommissioned Officer in Charge (NCOIC), Development Element. The NCOIC, Development Element, will:

- 2.4.1. Develop and manage course control documents (CCD) and associated training materials to support MTF courses and apply the ISD process for MTF formal training programs according to [Chapter 4](#) of this instruction.
- 2.4.2. Ensure assigned personnel attend an ISD course.
- 2.4.3. Develop and manage applicable distance learning, computer-based training (CBT), and interactive courseware (ICW) programs.

2.4.4. Manage the Maintenance Training Resource Center (MTRC) and associated training materials in support of maintenance/proficiency training courses.

2.4.5. Develop MTRC operating policies and procedures and include in the MTF maintenance operating instruction (MOI).

2.4.6. Establish written procedures to maintain, manage, and administer multimedia training programs and equipment.

2.4.7. Establish written procedures for administration and scoring of tests.

2.4.8. Ensure a job site training (JST) representative is established and identified according to the guidelines required by 2d Air Force.

2.5. NCOIC, Instructor Element. The NCOIC, instructor element, will:

2.5.1. Develop and manage a maintenance instructor (MI) training plan.

2.5.2. Maintain an instructor folder for each assigned and attached MI.

2.6. Maintenance Instructors. The MI will primarily support maintenance training programs; however, MIs may perform other MTF duties as determined by the MTF commander or superintendent.

2.6.1. Air Force Specialty Code (AFSC) Requirements. MTF-assigned MIs will possess AFSC 2A3X3X (tactical aircraft maintenance specialists), 2A5X1X (airlift aircraft maintenance specialists), 2A5X2 (helicopter maintenance specialists), 2A6XX (systems specialists), or 2W1X1 (armament systems specialists) and will occupy valid funded authorizations on the MTF unit manning document to meet wing maintenance training needs. Other instructor AFSCs may be authorized (for example, AGE, avionics, etc.) at wing discretion.

2.6.2. **Part-time Instructors.** When trained personnel requirements (TPR) do not warrant full-time instructors, appoint attached MIs to teach specialized or unique courses. These part-time instructors will be assigned to their respective squadrons and will conduct training using MTF-approved plans of instruction (POI) and personalized lesson plans.

2.6.3. **Criteria.** Consider the following criteria when determining the need for instructors:

2.6.3.1. Number of instructors required to support TPRs.

2.6.3.2. Quantity, length, and type of maintenance courses.

2.6.3.3. Instructor utilization and retainability (time on station, overseas return date, and expiration of current enlistment).

2.6.4. **Duties.** The MI will:

2.6.4.1. Successfully complete an Air Force academic/MI course and any applicable training detachment (TD) courses prior to performing instructor duty. **Note:** An academic/MI course is highly encouraged for attached instructors and is not required for prior "T" prefix instructors.

2.6.4.2. Serve as subject matter expert (SME), when required.

2.6.4.3. Attain and maintain qualification and certification on units and blocks of instruction assigned to teach.

- 2.6.4.4. Use approved CCDs and POIs to conduct training.
 - 2.6.4.5. Develop personalized lesson plans (part 2) for each course designated to teach, and obtain POI approval from the NCOIC, Instructor Element, prior to their use.
 - 2.6.4.6. Instruct students on equipment sign-in, inventory, and sign-out procedures according to AFI 21-101.
 - 2.6.4.7. Administer and control written and performance evaluation instruments.
 - 2.6.4.8. Consolidate weapon systems and support equipment requirements for TD and MTF classes, and send to plans, scheduling, and documentation for inclusion in the maintenance planning cycle (include these procedures in the training MOI).
 - 2.6.4.9. Ensure consolidated tool kits (CTK) (if required) are managed and controlled according to AFI 21-101.
 - 2.6.4.10. Assist TD instructors (if required) during the hands-on phase of training.
 - 2.6.4.11. Assist other MTF instructors with obtaining necessary supplies, tools, equipment, and aircraft (as required) to support MTF training courses.
 - 2.6.4.12. Annotate student task qualifications (start date, completion date, and certification) on applicable POI tasks in the Training Business Area (TBA).
 - 2.6.4.13. Monitor student performance and take corrective action (if required).
 - 2.6.4.14. Instruct maintenance orientation and MTF block training programs.
 - 2.6.4.15. Operate and maintain visual information equipment.
 - 2.6.4.16. When required, prepare training deficiency reports, and administer student course critiques, questionnaires, and other forms of feedback.
 - 2.6.4.17. Participate in the AETC biennial analysis of technical training (BATT) requirements process as requested.
 - 2.6.4.18. Record and report lost training time to the section chief.
- 2.6.5. Course Qualification Process. MTF MIs and attached MIs must be qualified to teach their respective courses. As a minimum, new MIs will:
- 2.6.5.1. Observe the course they will teach at least once before being assigned and attached to teach a course.
 - 2.6.5.2. Be observed by a qualified MI when teaching individual units/blocks of instruction the first time.
 - 2.6.5.3. Be observed by a qualified MI when teaching the entire course (academic and hands-on) the first time. The qualified MI will inform the NCOIC when the new MI is qualified to teach unassisted.
 - 2.6.5.4. Teach the entire course a second time with the NCOIC conducting an academic evaluation. Document the evaluation results on AETC Form 281, *Instructor Evaluation Checklist*. (Refer to AETCI 36-2202, *Faculty Development and Master Instructor Programs* for guidance on filling out AETC Form 281.) If evaluation results are

satisfactory, certify the new instructor to teach the course independently without assistance.

2.6.5.5. 314 MXG (Little Rock AFB) is waived from initial instructor qualification procedures explained above only for AMC-type Maintenance Qualification Training Program (MQTP) MMCL-directed courses, provided each instructor candidate is fully qualified to perform all tasks included in the courses they instruct. If they are not fully qualified on all tasks then comply with the evaluation provisions included above and ensure each instructor is trained and qualified on all course related tasks IAW AFI 36-2201 and CFETP requirements. To initially qualify to teach each course instructor nominees will observe the course they will teach a minimum of one time before being assigned and attached to teach a course. The NCOIC of Applications will evaluate the instructor on one knowledge-based objective and one performance-based objective and will document the evaluation results on AETC Form 281, Instructor Evaluation Checklist. If evaluation results are satisfactory, certify the new instructor to teach the course independently without assistance.

2.6.6. Evaluations (assigned and attached). MI evaluations will include:

2.6.6.1. Quality assurance (QA) will conduct initial and annual MI task proficiency evaluations for courses with objectives trained to the 3c (GO) proficiency level. Refer to Proficiency Code Key in AFI 36-2201 for proficiency level definitions.

2.6.6.2. The NCOIC (or designated representative) will conduct initial and semiannual MI academic evaluations.

2.6.6.3. Outline procedures for conducting initial and annual instructor evaluations in the MTF MOI.

2.6.7. Instructor Records. Maintain an instructor folder for each assigned and attached MI. MTF chief will review each instructor folder at least annually. Include the following items in each folder:

2.6.7.1. Initial and recurring QA evaluation results.

2.6.7.2. Initial and recurring academic evaluations.

2.6.7.3. A listing of the courses they are qualified to instruct.

2.6.7.4. MTF commander or chief approved instructor appointment memorandum.

2.6.7.5. Community College of the Air Force (CCAF) and other degree documentation (as applicable).

Chapter 3

TRAINING BUSINESS AREA (TBA)

3.1. Description: TBA is an Air Force portal web-based application that fully automates AF training documentation for all logistics and communications/information management communities. TBA provides users with global, real-time visibility into the technical qualifications, certifications, and training status of personnel. TBA replaces traditional paper-based training records as the standard tool to track and manage job position duty-based training.

3.2. AETC Applicability: TBA is used by aircraft and munitions maintenance personnel (specific Air Force specialties or civilian equivalents - DAFSC: 2AXXX, 2PXXX, 2RXXX, and 2WXXX). The use of TBA by AETC units is mandatory for aircraft maintenance personnel in the AFSCs identified above.

3.3. Responsibilities:

3.3.1. MAJCOM (HQ AETC/A4MMR) will:

- 3.3.1.1. Oversee and monitor TBA use in the command's maintenance units.
- 3.3.1.2. Serve as command focal point to receive and respond to higher headquarters taskings.

3.3.2. Maintenance Training Flights will:

- 3.3.2.1. Serve as unit focal point to receive and respond to MAJCOM taskings.
- 3.3.2.2. Manage TBA system use within managed organizations.
- 3.3.2.3. Assign TBA roles/permissions to system users IAW AFI 36-2232 and this instruction.
- 3.3.2.4. Process a "lose" employee action for individuals completing a PCS/PCA and an "archive" employee action for individuals separating/retiring.
- 3.3.2.5. Be continually engaged and monitor TBA utilization/maintenance processes to ensure system and training activities support the needs of the unit.
- 3.3.2.6. Provide training and assistance to unit TBA users.
- 3.3.2.7. Manage/control TBA workcenter database structure.
- 3.3.2.8. Ensure unit personnel information is entered into TBA.
- 3.3.2.9. Ensure training records for newly assigned personnel are initiated.
- 3.3.2.10. Review Training Visibility Ledger and associated analysis reports and initiate actions to overcome unfavorable trends or task coverage deficiencies.
- 3.3.2.11. Be loaded into the organization's TBA "Admin" workcenter (at least one primary and one alternate).

3.3.3. Supervisors will:

- 3.3.3.1. Ensure training is provided and documented in TBA for all personnel in any training status.

3.3.3.2. Coordinate training requirements and TBA issues with unit POCs.

3.3.3.3. Ensure development and accuracy of workcenter master training plan and individual training plans for all applicable personnel IAW AFI 36-2201.

3.3.3.4. Submit system requirements and shortfalls to unit POC.

3.3.3.5. Document completion of training for all personnel and ensure current and accurate training status.

3.3.3.6. Electronically sign system generated suspenses and journal entries for assigned employees, to include documentation of initial evaluations.

3.3.4. Employees/Trainees will:

3.3.4.1. Sign off completed training in TBA.

3.3.4.2. Electronically sign individual system generated suspenses and journal entries, to include documentation of initial evaluation.

3.4. Training: TBA software is of a intuitive nature so extensive formal user training is not necessary. Available Gunter-provided training resources include a standardized lesson plan for use AF-wide, student instructional materials, system users guide, task level video clips, and online help. Additionally there is a user practice environment (UPE) that replicates the production software for hands-on training use. Access to the UPE will be granted to unit POCs upon request to the MAJCOM POC.

3.5. Role Assignments: Actions in TBA are accomplished through various user “roles”, to include trainee, trainer, supervisor, etc. Various “power roles” are assigned to selected individuals in each organization to manage the system. Refer to AFI 36-2232 and the TBA users guide for additional information about roles and their capabilities. AETC/A4MMR will periodically make available to field units a Gunter developed role report. MTFs will use this report to monitor and manage role assignments. Elevated role assignments have a higher level of impact on managing the unit training program and consist of Unit Training Manager, Analyst, Personnel Manager, and Role Manager. Designation of elevated roles is limited. Exceptions to the following limitations must be approved in writing by the MTF and maintained in file. Note: UTM may be authorized all available roles in TBA as they must train each type of user in their responsibilities.

Table 3.1. TBA User Roles.

<i>Role</i>	<i>Purpose</i>	<i>Limitation</i>
Analyst	Used to manage workcenters	Only MTF assigned UTMs and Base Training Managers (BTM)
Commander	Organization-level managerial oversight	Commanders only
Flight Chief	Branch-level managerial oversight	Limited to branch-level or equivalent supervision

<i>Role</i>	<i>Purpose</i>	<i>Limitation</i>
Personnel Manager	Add, change, move personnel.	Only MTF assigned UTM's and BTM's
Role Manager	Authorizes role assignments	Only MTF assigned UTM's and BTM's
Workcenter Supervisor	Self-explanatory	Maximum of one primary and one alternate in each workcenter per shift.
Training Manager	Training management	<p>Maximum of two (2) Training Managers (primary/alternate) to perform wing level TBA duties.</p> <p>Maximum of two (2) Training Managers (primary/alternate) to perform the TBA squadron duties.</p> <p>Personnel assigned as a BTM are authorized the Training Manager Role to assist in performing Staff Assistance Visits.</p>
Trainee	Each employee	Each individual who requires a TBA training record.
Trainer	Personnel who conduct training	Limit to only those individuals who conduct and document training IAW AFI 36-2201 and CFETP (if applicable).
Certifier	Personnel who conduct third-party certification evaluations	Limit to only those individuals who conduct third-party certification evaluations IAW AFI 36-2201 and CFETP (if applicable).
Supervisor	Personnel who directly supervise employees	Limit to only those individuals who directly supervise employees.

3.6. Task type definitions:

3.6.1. Active tasks in TBA are those tasks that are required by a supervisor of a subordinate employee as part of that employee's duty position. Active tasks have been trained, certified,

and signed off in TBA with dates and supervisor/employee/trainee initials and are expected to be performed by an individual.

3.6.2. Archived tasks in TBA are considered inactive and individuals are not qualified or authorized to perform those listed tasks when in archive status. Archived tasks are those tasks an individual was formerly qualified to perform but is no longer signed off and not authorized to perform until a qualified supervisor or trainer either trains the individual or ascertains that the individual is qualified to perform the task, and then the task must be signed off and placed into “active” status.

3.7. Problem resolution: Users follow their TBA chain of command to resolve problems and receive assistance. Users contact their MTF for assistance and MTFs elevate problems as required. MTFs refer software related problems to the Field Assistance Service (FAS) team, DSN 596-5771 option 1 then 4 and 2 or by email at 754.dom.team4@Gunter.af.mil. MTFs contact the MAJCOM POC for assistance with policy and procedure matters.

3.8. Records Lock Out Procedures: In the event of a Class A mishap incident, the MXG/CC will determine if TBA training records require lock out. When directed by the MXG/CC, the MTF will contact the Field Assistance Service (FAS) at DSN 596-5771 to open a remedy ticket and request users be locked from accessing TBA due to Class A mishap. Identify either specific user employee numbers (records) or a specific TBA organization (which will cause a lock out of all employees in that organization) and the date of the incident. The MTF will also notify HQ AETC/A4MMR of the requested action on the first duty day following the request to the FAS. The FAS will open a ticket and forward the request to level II (TBA Program Office). Level II will lock out all requested employee records. Any user whose account has been locked by the TBA program office will receive a "locked" notice if they attempt to access TBA. The records will remain locked until the MXG/CC directs otherwise, at which point the MTF will notify the FAS to unlock the records and close the ticket.

Chapter 4

INSTRUCTIONAL SYSTEMS DEVELOPMENT (ISD)

4.1. Application of the ISD Process:

4.1.1. Apply the ISD process to all maintenance training programs. The governing publication for ISD is AFI 36-2201. Additional information on ISD development can be found in AFMAN 36-2234, *Instructional Systems Development*, and AFH 36-2235, Volume 11, *Information for Designers of Instructional Systems—Application to Unit Training*.

4.1.2. Use the ISD process to plan, develop, and manage instructional programs. Before instruction begins, identify task statements and develop learning objectives and tests to support them. Identify the instructional methods to be used along with the required supplies and resources. Evaluations provide valuable information and are established to determine course validity and the student's attainment of the learning objectives. Feedback from both internal and external sources provides a continual source of data upon which course revision decisions can be made.

4.1.3. Use an ISD project plan (or facsimile) during initial development or revision (20 percent or more of the objectives change, or a change of 8 hours or more is required) for all structured maintenance training courses that provide task qualification or certification. Maintain the completed plan for historical purposes with the respective CCDs. Retain only the initial and most current ISD project plan on file.

4.2. ISD Project Management. Manage the status of ISD projects through the various stages of production and coordination. Monitor this information through the use of wall charts, automated products, general purpose forms, etc. Regardless of the method used, keep the program status current at all times, and include the information identified below, as a minimum:

4.2.1. Course number.

4.2.2. Course title.

4.2.3. Start date.

4.2.4. Required completion date.

4.2.5. Project SME or office of primary responsibility (OPR).

4.2.6. ISD phase (development only).

4.2.7. OPR office symbol.

4.2.8. Status.

4.3. File Plan. Establish a file plan in accordance with AFI 33-322, *Records Management Program*, and AFMAN 33-363, *Management of Records*. As a minimum, keep the following items current, and maintain (paper-based or electronic) in the development element:

4.3.1. Master CCD inventory log.

4.3.2. Master sets of CCDs.

4.3.3. Master visual information inventory log.

- 4.3.4. Folders for audiovisual programs.
- 4.3.5. Student and supervisor questionnaires.
- 4.3.6. Course critiques and assessments.
- 4.3.7. Tests and test analyses.
- 4.3.8. Completed MTF class packages.
- 4.3.9. Master copy of the course catalog.
- 4.3.10. Master copy of student training materials.

4.4. Course Control Documents. Instructors use CCDs to identify and standardize training requirements for a specific course of instruction.

4.4.1. Structured formal maintenance training provided by the MTF will have CCDs, for example, egress, engine trim, weapons load training, borescope, etc., or when directed by publications, higher headquarters, MXG/CC, or when recommended by the Curriculum Advisory Committee (CAC), and approved by the MXG/CC.

4.4.2. Identify CCDs by course number, course title, and date ([Attachment 4](#)). Contents will include, as a minimum:

- 4.4.2.1. Cover page.
- 4.4.2.2. ISD project plan (or facsimile).
- 4.4.2.3. Course chart/training standard (CC/TS) ([Attachment 5](#)).
- 4.4.2.4. POI.
- 4.4.2.5. AF IMT 1768 ([Attachment 6](#)).
- 4.4.2.6. Course background material (results of CAC, project plan, etc.).

4.4.3. Do not change CCD instructional content without sending a copy of the change to CCAF (if applicable) for evaluation purposes. Pen and ink changes are allowed to all pages of the CCDs or POI, as applicable, as long as the instructional content is not changed. If the cover memorandum's signature page course content is changed, send the CCDs or POI through the appropriate approval process at the time of the change. The development section will publish pen and ink page changes to the course documents, and provide necessary changed page copies to the instructor for updating personalized copies. The development element will update the master copy of the CCDs or POI as applicable. Up to 5% of total course time may be changed without rerouting CCDs for re-approval.

4.4.4. Maintain data for each audiovisual training program and include, as a minimum:

- 4.4.4.1. Script (if available).
- 4.4.4.2. Course critique.
- 4.4.4.3. Background material pertaining to the particular course.
- 4.4.4.4. AETC Form 17, *Visual Information Certification Sheet*.
- 4.4.4.5. 24-month reviews (AF IMT 1768).

4.4.5. MTF course critiques and class packages (maintain on file by course name or number, and training completion date.)

4.5. Class Packages. MTFs will establish and maintain a class package for each course taught.

4.5.1. Class packages will include the following:

4.5.1.1. Class roster.

4.5.1.2. Name of the MI.

4.5.1.3. QA student evaluations (if applicable).

4.5.1.4. Course critique and assessment.

4.5.1.5. Student and supervisor questionnaires (if applicable).

4.5.1.6. Copy of the field evaluation questionnaire summary (as applicable).

4.5.1.7. AF IMT 1768 or electronic staff summary sheet.

4.5.1.8. Instructor summary of information contained in the class package, for example, number of students, attitude of students, comments noted from student critiques, assessments, or questionnaires, and QA evaluation results (as applicable).

4.5.2. Do not begin the coordination process until all required information and documentation are received to prevent review process duplication.

4.5.3. Forward completed class packages to the MTF commander or chief for review and coordination, and dispose of them after the 24-month review is accomplished. **Note:** Report CCAF applicable class packages to CCAF prior to disposal. Maintain non-CCAF-accredited courses according to the Air Force RDS. Maintain course graduate data for CCAF accredited courses as directed by CCAF Campus Affiliations Policies, Procedures, and Guidelines (PPG), paragraph 17, located at [http:// www.au.af.mil/au/ccaf](http://www.au.af.mil/au/ccaf).

4.6. Course Catalog:

4.6.1. MTFs will develop and maintain a current catalog that shows available courses, course numbers, course durations, a brief synopsis of each course, and course prerequisites. The catalog will be of local design and include, as a minimum, a listing of:

4.6.1.1. AFETS, CETS , and FSR-conducted courses (if applicable).

4.6.1.2. MTF courses offered.

4.6.1.3. ICW and CBT programs.

4.6.1.4. Applicable TD courses (not required if a separate TD course catalog is available).

4.6.2. Catalog distribution (display electronically on the local intranet in lieu of distributing hard copies if desired). If not in an electronic format, provide a copy to each commander, UTM, and workcenter. Provide an electronic or paper copy to HQ AETC/A4MMR at least every 24 months.

4.7. Curriculum Advisory Committee. The MTF CAC will:

4.7.1. Consist of the development element (chairperson), MTF commander or chief (optional), UTM (as required), SMEs, TD (as required), and all applicable workcenter supervisors and superintendents.

4.7.2. Convene when a requirement to develop a new course is identified. **Note:** Units must identify their requirements (in writing) to the MTF commander or chief.

4.7.3. Use the ISD process to determine if a training need exists.

4.7.4. Identify training constraints and possible workarounds.

4.7.5. Discuss possible alternatives to satisfy the training request.

4.7.6. Determine the most cost-effective and efficient methods to conduct training.

4.7.7. Identify tasks that may be certified (Go-level) during training.

4.7.8. Recommend to the MTF commander or chief the training agency that is in the best position to conduct requested training.

4.7.9. Determine the best course of action to resolve training issues.

4.7.10. Publish minutes and coordinate inputs and/or recommendations with appropriate organizations.

4.7.11. Forward written minutes and recommendations to the MTF commander or chief for approval or disapproval.

4.7.12. File all documented results in the development element in accordance with the Air Force RDS.

4.8. Course Chart/Training Standard. The CC/TS is an official CCD that defines the training specifications for a particular course. It prescribes qualitative requirements in terms of tasks, knowledge, and proficiency levels. The signature page identifies the course training number, MIS course code, date, course title, purpose, course description, qualitative requirements, attachment tables, and recommendations. Entries on Table I of the CC/TS consist of course number, OPR, security classification, course length, effective date, instructor to student ratio, student prerequisites, and a summary of course content that is broken down by time blocks or units. This data correlates with the applicable POI. Entries on Table II consist of course number, required equipment, administrative, operational, and facility support, and summary of changes. Use the CC/TS as the basis for the development of the POI. As a minimum, the CC/TS will contain the following:

4.8.1. Cover memorandum/approval page. Prepare the cover memorandum/approval page.

4.8.2. Proficiency code key. Use the standard proficiency code key and overprint on the reverse side of the approval page ([Attachment 2](#)).

4.8.3. Table I. ([Attachment 7](#)).

4.8.4. Table II. The format for Table II is determined by the type and amount of equipment, administrative, operational and facilities support detail needed to obtain/schedule course support (see format at [Attachment 8](#)). The development element establishes the format and content of the course support resources list.

4.9. Plan of Instruction. Use POIs to manage and conduct training programs, and to convert task and knowledge statements identified in the CC/TS into behavioral objectives. Each unit of instruction will have criterion objectives that include a condition, behavior and standard statement, teaching steps, CC/TS references, student measurement, duration, support materials, and other guidance factors as applicable.

4.9.1. Course Orientation Units. POIs must have a course orientation unit (unmeasured) that is limited to a maximum of one hour. If necessary, provide student handouts to supplement orientation and introductory material.

4.9.1.1. As a minimum, the course orientation will cover course overview, completion criteria, student critique and assessment program, and benefits/credits awarded by the CCAF (if applicable).

4.9.1.2. Include the following subjects in the course, if applicable: conservation of energy; environmental awareness; Privacy Act; MIS; fraud, waste, and abuse; security; and forms documentation.

4.9.2. Instructional Units. Except for the orientation and graduation units, instructional units will contain one or more objectives, supporting teaching steps, and instructional guidance.

4.9.3. Other Requirements. Integrate job-oriented safety, occupational health, environmental issues, forms documentation, MIS inputs, the Air Force technical data system, and other publications applicable to the Air Force specialty throughout the course.

4.9.4. Instructional Times. Actual instructional times may vary due to difference in class size or student ability.

4.9.5. Printing POI. Print POI pages on one side only.

4.9.6. POI Content. The standard POI contains the following pages:

4.9.6.1. Cover Page. The cover page may be of local design with unit aircraft or emblem ([Attachment 9](#)).

4.9.6.2. Page A ([Attachment 10](#)).

4.9.6.3. Page I signed by MXG/CC ([Attachment 11](#)).

4.9.6.4. Orientation and introduction ([Attachment 12](#) through [Attachment 15](#)).

4.9.7. POI Continuation Sheets. Center the heading COURSE CONTENT (CONTINUED) at the top of the page, and type the POI course number, block, unit, date, and page number at the bottom of the page.

4.9.8. Criterion Objectives. Each unit of instruction should cover one or more criterion objectives. Begin each criterion objective statement on a separate POI continuation sheet. Each objective within a unit of instruction begins at the top of a continuation sheet followed by its teaching steps and instructional guidance.

4.9.9. Outlining POIs. When outlining POIs, apply general outlining rules. For example, if using a "1," you must use a "2"; if using an "a," you must use a "b," and so forth. When numbering multiple blocks of instruction, each unit of a new block of instruction will start with the number 1. For example, Block 1, Units 1 through 5, Block 2, Units 1 through 3, etc.

4.9.10. **Time.** Enter the time that corresponds to the hours shown in Table I of the CC/TS. Enter the time to the right of each objective if the unit of instruction contains more than one objective.

4.9.11. **Teaching Steps.** These are steps of learning, presented in statements of subject matter content or in behavioral (action) terms, that lead to the attainment of a criterion objective. Each teaching step should be directly related to and support the objective.

4.9.12. **Instructional Guidance.** Instructional guidance is required for each criterion objective and provides standardized guidance to instructors on how to develop the lesson. Do not introduce new material that should be included as teaching steps or repeat teaching steps unless further explanation is required. Include the following instructional guidance in the course orientation for all courses that contain progress checks (PC) for task performance objectives:

4.9.12.1. Inform the students that instructors will assess accomplishment of each course objective through the use of a progress checklist.

4.9.12.2. The instructor is the evaluator and does not become involved in student performance unless, in the instructor's judgment, an assist should be given to prevent any violation of technical data or action that could result in personal injury, damage to equipment, or render the equipment unreliable.

4.9.12.3. An instructor assist will also be accorded when the student is unable to proceed toward the accomplishment of the objective due to lack of knowledge.

4.9.12.4. Inform the students they are being evaluated, and how many instructor assists will be allowed before each PC.

4.9.13. **Special Instructions.** Include any needed special instructions; for example, use of audiovisual aids, specific use of equipment, use of host technician assistance, safety precautions, occupational health hazards, environmental awareness, foreign object damage prevention, and administration of egress checks, etc. When students use egress-equipped aircraft or cockpit-configured trainers to perform course objectives, include the following statement: "The instructor will demonstrate egress safety inspection procedures during the first course objective that requires cockpit entry. The instructor will observe the student performing egress safety inspections on each additional objective requiring cockpit entry."

4.9.14. **Course Critique and Graduation Page.** Entries shown in [Attachment 16](#) reflect the items that are normally covered in all courses.

4.10. Course Validation Process. Validate new or existing MTF courses that require major revisions (a change in 20 percent or more of the criterion objectives) prior to approval. Course validation is a process by which curriculum materials, instructional procedures, training media, and training materials are reviewed for instructional accuracy, adequacy, suitability for presentation, and training effectiveness. Validation is a process that assesses the effectiveness of a course as it is developed and is a quality improvement tool that helps identify problems during development so revisions can be made. Accomplish validation while developing segments, units, or blocks of instruction.

4.10.1. Develop a plan prior to the start of the course validation process. This plan provides curriculum developers and instructors with a roadmap for validating the course. Include the following:

- 4.10.1.1. Description of the course to be validated (objectives, method, and media).
- 4.10.1.2. Individuals used to validate the course.
- 4.10.1.3. Validation procedures.
- 4.10.1.4. Validation schedule.
- 4.10.1.5. Number of tryouts conducted.
- 4.10.1.6. Number of students used in small group tryouts.
- 4.10.1.7. Sources of how results are documented.
- 4.10.1.8. How problems are resolved.
- 4.10.1.9. Revision schedule.

4.10.2. Prior to the course validation process, develop a tentative POI and have the development element review it before the start date of the first validation class.

4.10.3. Avoid training deficiencies, and ensure training conducted during validation satisfies all course proficiency codes or behavioral statements listed in the training standard.

4.10.4. As a minimum, conduct two small group tryouts (selected students) during course validation to determine whether the instruction is appropriate and effective for the targeted student population. Award course credit to students upon completion of the small group tryout. **Note:** If problems arise during small group tryouts, convene a working group to resolve.

4.10.5. Conduct one operational tryout on the target population. Award course credit to students upon completion of operational tryout.

4.10.6. After validation has been completed and revisions accomplished, coordinate the POI with appropriate agencies prior to final MXG/CC approval.

4.10.7. Maintain validation documentation with the master CCD.

4.11. Dating of CCDs. Normally, the CC/TS and POI have the same date. If changes are made to the POI that do not affect the CC/TS, only the POI needs to reflect the most current date (dates on the CC/TS will not change). Initially, to ensure that the POI, CC/TS, and AF IMT 1768 have the same dates, **do not date the course control documents until they are completely coordinated**, and submitted to the MXG/CC for approval.

4.12. Numbering System for CCDs. Use a standardized numbering system for all local CCDs ([Attachment 4](#)).

4.13. Review and Approval of CCDs:

4.13.1. All CCDs are subject to a 24-month review with the exception of deactivated courses. This 24-month cycle may not apply if the interval for certain courses is prescribed by other instructions. (For example, AFI 21-101 requires explosive safety CCDs be coordinated through wing weapons safety office annually.)

4.13.2. The NCOIC, Development Element, will establish a suspense file to ensure CCDs are reviewed on time.

4.13.3. Use the AF IMT 1768 ([Attachment 6](#)) to coordinate both initial and periodic CCD reviews. An automated system may be used for coordination. Maintain printed copies of automated coordination.

4.13.4. Completed AF IMTs 1768 are a permanent part of the master CCD files.

4.13.5. The MTF commander or chief signs the AF IMT 1768. As a minimum, coordinate with the following individuals or offices:

4.13.5.1. SMEs.

4.13.5.2. QA and MXG/CC, as applicable, for structured maintenance training courses that provide task qualification or certification.

4.13.5.3. Development element.

4.13.5.4. Wing safety, as applicable.

4.13.6. Once coordination is complete and the CCDs or POI is approved, file the AF IMT 1768 in the master CCDs or POI. Update the course documents in the master CCDs or POI maintained in the development section. The development section will forward applicable course document changes to the instructors. **Note:** CCAF-affiliated MTFs will forward one copy of the master CCD for degree or certification evaluation in accordance with AFI 36-2304, *Community College of the Air Force*.

4.13.7. If the MXG/CC changes after the course documents have been approved, signature pages for the "CC/TS and Foreword" remain valid until the next course revision.

4.13.8. Coordinate new or revised TD CC/TSs on AF IMT 1768 with workcenters and other agencies to ensure course content and accuracy.

4.13.9. The NCOIC, Development Element, will provide each instructor with the approved CC/TSs and POIs for the courses he or she will teach, and ensure the instructor copies are current and match the master file set maintained in the development section. Except for instructor personalization of the teaching guide (lesson plan part two), no other written entries are authorized.

4.14. Test Development. The primary purpose of testing is to assess the student's attainment of the behavior specified in the objectives. To ensure tests adequately measure the objective, the performance required in the test must match the performance required in the objective. Test development should occur immediately after objectives have been written. For additional guidance on test development, see AFMAN 36-2234.

4.14.1. Course developers must consider several characteristics (validity, reliability, and usability) when developing tests, and ensure tests measure exactly what they are designed to measure every time.

4.14.2. Test items selected should be clear, concise, and well written to minimize misunderstanding. Within AETC aircraft maintenance training, multiple-choice tests are the most commonly used type of written test. Use matching, short-answer essay, fill-in-the-blank, and true and false questions sparingly.

4.14.3. Avoid duplicate test items if possible. If circumstances limit the variety of test items supporting an objective, reword items, resequence answers, or scramble items on the alternate version to deter test compromise.

4.14.4. Test booklets may be of local design and, as a minimum, will include:

4.14.4.1. Cover page.

4.14.4.2. Instruction page.

4.14.4.3. Control number.

4.14.4.4. Date.

4.14.4.5. Test compromise statement.

4.14.5. Sequentially numbered test booklets. One copy, labeled, as the "MASTER" will identify the references used to develop each test question. Also, develop a "MASTER" answer key. **Note:** Structure engine run tests so emergency procedure questions are readily identifiable. For example, Part I emergency procedures; Part II - normal engine run procedures.

4.15. Test Analysis. Analyze all test items to determine if there are any potential problems or trends.

4.15.1. To determine the validity and reliability of written test questions, accomplish an ongoing analysis using locally devised manual methods or an automated testing program.

4.15.2. Analyze both primary (A) and alternate tests (B) to ensure validity and reliability of tests. Accomplish this by rotating the test used for each class.

4.15.3. Maintain the completed test analysis worksheet or automated testing program on file.

4.16. Management of Unclassified Testing Materials. Control test materials at all times to prevent compromise. Use written or automated tests to evaluate an individual's knowledge and understanding of information contained in applicable technical data or management directives. Administer open or closed book; however, closed book is mandated for all courses requiring certification, for example, engine run. Unit procedures are as follows:

4.16.1. Store testing materials used for testing in a locked cabinet, and identify them on the master test control log.

4.16.2. Inventory tests quarterly using either the master test control log or a locally developed inventory sheet.

4.16.3. Control tests through a sign-in and sign-out log.

4.16.4. Review test materials with the respective CCD during the periodic review required by AFI 36-2232, or when changes to course objectives warrant a review. Document this review on the same AF IMT 1768 used for the periodic CCD review. Identify the test(s) separately on the AF IMT 1768.

4.16.5. If a test compromise is suspected, refer to procedures outlined in [Attachment 17](#).

4.17. Student Training Materials. Student training materials will:

4.17.1. Have the following statement placed on the bottom of the cover page of each publication in bold lettering: **“FOR TRAINING PURPOSES ONLY. DO NOT USE ON THE JOB.”** This includes training materials as handouts, programmed texts, and study guides.

4.17.2. Display the course identification number plus one of the following codes:

4.17.2.1. Handout (HO).

4.17.2.2. Programmed text (PT).

4.17.2.3. Study guide (SG).

4.17.2.4. Workbook (WB).

4.17.3. Use cover sheets which may be of local design.

4.17.4. Not contain technical data or serve as a replacement for it. Appropriately mark and control classified materials, if used.

4.17.5. Be referenced in the applicable POI.

4.18. Student Measurement. Student measurement in AETC maintenance training is a systematic process used to determine whether a student can perform the behaviors specified in an objective. Use measurement devices such as performance evaluations, written tests, and oral questions to evaluate student achievement of course objectives. Additionally, use tests to evaluate an individual's knowledge of procedures contained in applicable technical data or management directives as applicable. **Note:** Student measurements (standards) are not required in behavioral statement for familiarization or orientation criterion objectives.

4.18.1. The student measurement process will:

4.18.1.1. Ensure students are measured on course objective before graduation.

4.18.1.2. Identify students who need special individual assistance or additional training.

4.18.1.3. Inform students of their progress in the course, stimulate effective learning, and reinforce knowledge and skills.

4.18.2. Certain courses have student measurement requirements. The following courses have written tests and, when required, a performance evaluation (or both, in some instances):

4.18.2.1. Certification courses.

4.18.2.2. AETC formal courses.

4.18.2.3. Objectives that require the student to perform a task.

4.18.3. Subject knowledge evaluations may be written or oral. **Note:** If oral evaluations are used, the instructor must develop a list of questions to ensure standardization for each class.

4.18.3.1. The number of test questions required is generally determined by the complexity and criticality of the subject matter being taught. The test must be comprehensive in nature and sample all course objectives. For additional test development information refer to AFH 36-2235, Volume 9, *Information for Designers or Instructional Systems—Application to Technical Training*, or AFH 36-2235, Volume 12, *Information for Designers of Instructional Systems—Test and Measurement Handbook*.

4.18.3.2. Written tests are based on a pass or fail system with 70 percent as the minimum passing score. This standard does not apply to other training programs that have different requirements already established.

4.18.4. Students failing a written test must wait at least 24 hours before retesting. Readdress students' weak areas prior to retesting, and provide an alternate test.

4.18.5. Provide remedial instruction to students failing a behavioral objective, and reevaluate on the failed behavioral objective.

4.18.6. Use task and performance evaluations for criterion objectives that require students to perform tasks.

4.18.7. A criterion objective checklist may be developed and used for task and performance evaluations. However, do not use this checklist in lieu of technical data, and measure all evaluations using applicable technical reference.

4.18.8. Base task and performance evaluations on the **Go/No-Go** system with a 100 percent pass rate.

4.18.9. Students who fail the task and performance evaluation will receive remedial on-the-job training and be reevaluated on the failed task. If the student repeatedly fails the performance evaluation, the instructor will document the student's training record showing noncertification of that task.

4.18.10. Refer to AFH 36-2235, Volumes 9 and 12, and AFMAN 36-2236, *Guidebook for Air Force Instructors*, for further guidance on test development.

4.19. Technical Data for Training:

4.19.1. Technical data such as technical orders (TO), job guides, inspection workcards, and checklists will serve as the primary instructional material when conducting training on maintenance or operational aircraft systems and equipment.

4.19.2. Students will use published technical data when operating or performing maintenance on aircraft systems, subsystems, or AGE.

4.19.3. Supplemental literature may be developed when technical data is unavailable or insufficient. Course SMEs will approve this material.

4.20. Course Critiques:

4.20.1. Course critiques look at the training system from within to determine system effectiveness and quality. They are required for all maintenance training programs. Note: Critiques of block training and maintenance orientation are optional as determined by the MTF. Critiques may be completed individually or as a group. However, individual critiques and assessments are highly recommended. Use AETC Form 19, *Maintenance Training Course Critique*. Locally devised critiques are permitted provided they include all items on the AETC Form 19 and are approved by the MTF commander or chief. Dispose of course critiques and assessments after the periodic course review.

4.20.1.1. File MTF course critiques and assessments with the appropriate class package.

4.20.2. The instructor or course administrator will answer negative comments and comments recommending improvement. The MTF commander or chief will review and endorse.

4.21. Field Questionnaires. Use field questionnaires, if determined necessary, to gather and analyze data from outside the training environment in order to determine how well recent graduates are meeting job performance requirements.

4.22. Visual Information (VI) Media (Production and Documentation). Training programs using videotapes, CBT, and ICW as the primary instructional media are very effective in satisfying course objectives. The Joint Visual Information Services Distribution Activity (JVISDA) distributes DOD, Air Force, and MAJCOM videotapes through online ordering on the Defense Automated Visual Information Service (DAVIS) Web site at <http://dodimagery.afis.osd.mil/>. For assistance, call DSN 795-7937, or commercial (717) 895-7937. Use the following information to manage this medium:

4.22.1. Visual Media Production:

4.22.1.1. Coordinate video production requests through the base VI manager.

4.22.1.2. Maintain a copy of the visual production requests according to the AF RDS.

4.22.1.3. Maintain approval and disapproval documents according to the AF RDS.

4.22.2. Subject Matter Expert Certification. SMEs will certify all visual programs on an AETC Form 17 to ensure they are technically correct prior to use.

4.22.3. Visual Program Review:

4.22.3.1. SMEs or a QA representative will review visual programs that support CCDs during the 24-month course review. Document the review (can be accomplished on the same staff summary sheet used during the CCD 24-month review; however, units may use a general purpose form or automated system).

4.22.3.2. The NCOIC, Development Element, will establish a suspense system to ensure visual programs are reviewed on time.

4.22.3.3. ICW does not require a 24-month review.

4.22.4. Visual Program and Equipment Control:

4.22.4.1. If visual programs are not used for a period of 6 months or more, notify all users and flight line maintenance agencies that the program may be removed from the MTF inventory if not used.

4.22.4.2. If visual or ICW programs are not used for a period of 12 months or more, inform the MTF commander or chief to permanently remove the program from the MTF inventory.

4.22.4.3. Use AF IMT 1297, *Temporary Issue Receipt*, to sign out visual equipment.

4.22.4.4. Establish a preventive maintenance inspection program for all visual equipment assigned to the MTF.

4.23. Lesson Plans (LP) Personalization. LPs are approved plans for instruction that provide specific definition and direction to the instructor on the learning objectives, equipment, instructional media material requirements, and conduct of training.

4.23.1. Instructors will maintain a current approved LP for each course they are qualified to teach.

4.23.2. The NCOIC, application element, will approve LPs and annotate the instructor's copy of the course cover sheet.

4.23.3. LP approval is required prior to initial use or when a course is revised, and/or in conjunction with the periodic review required by AFI 36-2232.

4.23.4. The LP consists of an introduction, body, and conclusion for each topic, task knowledge, and subject knowledge statement (**Attachment 18-Attachment 20**). Incorporate the orientation into the course's first introduction section. The introduction includes the attention, motivation, overview, and transition steps.

4.23.4.1. Use the attention step to gain students' attention alerting them that the instructor is ready to begin the lesson.

4.23.4.2. Use the motivation step to gain students' interest in the training, which may be combined with the attention step. The instructor should explain why it is important for the students to learn the information presented during the training session.

4.23.4.3. The overview step provides an explanation of what to expect during the lesson and normally includes an explanation of the objectives and the major teaching steps. The overview provides a roadmap to help the student follow the lesson.

4.23.4.4. The transition step allows the instructor to move from the introduction to the body of the instruction, and it is used to focus the students' attention on the first major teaching step.

4.23.5. The body identifies the objective, teaching steps, and substeps. Use interim summaries for longer blocks and units of instruction, as needed.

4.23.6. A summary of the information is presented after the last teaching step of each objective. The conclusion should contain summary, remotivation, and closure steps.

4.23.6.1. Use the summary to remind the student of the objective and the major teaching steps of the lesson. This step allows the student to review the information learned and clear up any misconceptions. The summary should reemphasize safety and the use of TOs, if applicable, to reiterate the importance of understanding material presented, and summarize key points. Include any other items deemed appropriate by the instructor. It should not introduce new material.

4.23.6.2. The remotivation step allows the instructor to remind the student the importance of remembering what was taught and how the information applies to the student.

4.23.6.3. The closure statement lets the student know the lesson is over.

CRAIG A. BERLETTE, Col, USAF
Deputy Director, Installations, Logistics, and
Mission Support

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 21-1, *Air and Space Maintenance*, 25 February 2003

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010

AFI 33-322, *Records Management Program*, 4 June 2012

AFMAN 33-326, *Preparing Official Communications*, 25 November 2011

AFMAN 33-363, *Management of Records*, 1 March 2008

AFI 36-2201, *Air Force Training Program*, 15 September 2010

AFI 36-2232, *Maintenance Training*, 22 February 2006

AFI 36-2304, *Community College of the Air Force*, 1 September 1999

AFMAN 36-2234, *Instructional Systems Development*, 1 November 1993

AFH 36-2235, Volume 9, *Information for Designers of Instructional Systems—Applications to Technical Training*, 1 November 2002

AFH 36-2235, Volume 11, *Information for Designers of Instructional Systems—Application to Unit Training*, 1 November 2002

AFH 36-2235, Volume 12, *Information for Designers of Instructional Systems—Test and Measurement Handbook*, 1 November 2002

AFMAN 36-2236, *Guidebook for Air Force Instructors*, 12 November 2003

Prescribed Forms

AETC Form 17, *Visual Information Certification Sheet*, 15 Feb 2008

AETC Form 19, *Maintenance Training Course Critique*, 15 Feb 2008

Adopted Forms

AF Form 623, *On-The-Job Training Record*, 01 Oct 1996

AF IMT 623a, *On-the-Job Training Record—Continuation Sheet*, 01 Mar 1979

AF IMT 797, *Job Qualification Standard Continuation/Command JQS*, 01 Aug 2002

AF Form 1256, *Certificate of Training*, 01 Nov 1986

AF IMT 1297, *Temporary Issue Receipt*, 01 Jul 1987

AF IMT 1768, *Staff Summary Sheet*, 01 Sep 1984

AFTO Form 244, *Industrial/Support Equipment Record*, 13 Jan 2011

AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*, 11 Sep 2008

AETC Form 281, *Instructor Evaluation Checklist*, 09 Sep 2009

AETC Form 666, *Change to Inspector/Special Certification Listing*, 25 Jun 2007

AETC Form 1236, *Request for Improving/Changing AETC Maintenance Publications*, 22 Sep 2006

Abbreviations and Acronyms

AFETS—Air Force engineering and technical services

AFSC—Air Force specialty code

AGE—aerospace ground equipment

BATT—biennial analysis of technical training

CAC—Curriculum Advisory Committee

CBT—computer-based training

CC—course chart or commander

CCAF—Community College of the Air Force

CCD—course control document

CC/TS—course chart/training standard

CETS—contract engineering technical services

CFETP—career field education and training plan

COR—Contracting Office Representative

FAS—Field Assistance Service

FSR—field service representative

GITA—ground instructional training aircraft

ICW—interactive courseware

ISD—instructional system development

ITP—individual training plan

JQS—job qualification standard

JST—job site training

LP—lesson plan

MAJCOM—major command

MDS—mission design and series

MI—maintenance instructor

MIS—management information system

MMCL—MAJCOM mandatory course listing

MOI—maintenance operating instruction

MOS—maintenance operations squadron

MTF—maintenance training flight
MTP—master training plan
MTRC—Maintenance Training Resource Center
MXG—maintenance group
NCOIC—noncommissioned officer in charge
OPR—office of primary responsibility
PC—progress check
POC—point of contact
POI—plan of instruction
QA—quality assurance
SATP—Security Assistance Training Program
SCR—special certification roster
SME—subject matter expert
SOT—status of training
STS—specialty training standard
TBA—training business area
TD—training detachment
TO—technical order
TPR—trained personnel requirement
UTM—unit training manager
VI—visual information
WTM—workcenter training monitor

Attachment 2

SAMPLE FORMAT FOR PROFICIENCY CODE KEY

A2.1. Purpose of Proficiency Code Key. The proficiency code key is used to identify the task performance and knowledge levels for a specific task or several tasks. The scale value should be referred to when writing task and knowledge objectives.

A2.2. Proficiency Code Key Table. Use [Table A2.1](#) to determine the proficiency code key.

Table A2.1. Proficiency Code Key.

ITEM	A	B	C
	SUBJECT	SCALE VALUE	DEFINITION
1	Task performance levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
		2	Can do most parts of the task. Needs help on the hardest parts. May not meet local demands for speed or accuracy. (PARTIALLY PROFICIENT)
		3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
		4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
2	*Task knowledge levels	a	Can name parts, tools, and simple facts about the tasks. (NOMENCLATURE)
		b	Can determine step-by-step procedures for doing the task. (PROCEDURES)
		c	Can explain why and when the task must be done, and why each step is needed. (OPERATING PROCEDURES)
		d	Can predict, identify, and resolve problems about the task. (ADVANCED THEORY)
3	**Subject knowledge levels	A	Can identify basic facts and terms about the subject. (FACTS)
		B	Can explain relationship of basic facts and state general principles about the subject. (PRINCIPLES)
		C	Can analyze facts and principles, and draw conclusions about the subject. (ANALYSIS)
		D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)

LEGEND:

*A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task (for example, b or 1b)

**A subject knowledge scale may be used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks

Attachment 3**SAMPLE FORMAT FOR CCD AND VI PROGRAM REQUEST WORKSHEET**

A3.1. CCD and VI Program Request Worksheet. The course control document and VI program request worksheet is used to justify the development of training programs and courses. Use the following example:

MEMORANDUM FOR (Insert appropriate office)

FROM: (Insert your organization/office)

SUBJECT: Course Control Documents and Visual Information Program Request Worksheet

1. The following information is provided as justification for the development of a course:

a. Why is this training needed?

(1) Directed by instruction _____

(2) Directed by higher headquarters _____

(3) Directed by the MXG/CC _____

(4) Other _____

b. What is the overall objective of this course?

c. Who is the target population?

d. How often will the course be taught?

e. Who will instruct the course?

f. Will the training be tracked in MIS?

g. Where will the training be conducted?

h. What is the class start date?

i. When are the CCDs needed?

j. Does the course require any test to be developed?

k. Who are the subject matter experts?

(1) Name: _____

(2) Duty Phone: _____

(3) Section: _____

2. Provide any additional remarks concerning request. _____

Signature of Requester

Attachment 4

SAMPLE FORMAT FOR CCD NUMBERING SYSTEM

A4.1. CCD Numbering System and Examples. Table A4.1 displays the codes used to standardize the numbering system for all MTF course control documents:

Table A4.1. Course Numbering System.

ITEM	A	B
	Code	Long Title
1	AC	AIRCRAFT (INCLUDES ALL ON-AIRCRAFT ACTIONS)
2	AV	AVIONICS MAINTENANCE TRAINING
3	CC	CORROSION CONTROL TRAINING
4	EG	EGRESS TRAINING
5	EM	ENGINE MANAGEMENT TRAINING
6	FM	FORMS MANAGEMENT TRAINING
7	GE	GENERAL SUBJECT TRAINING PROGRAM
8	MM	MUNITIONS TRAINING
9	SE	SUPPORT EQUIPMENT TRAINING
10	ST	SAFETY TRAINING
11	SU	SUPPLY TRAINING

EXAMPLE 1 - COURSE NUMBER

SE56/1090-000191

SE	SUPPORT EQUIPMENT TRAINING
56	WING DESIGNATION NUMBER
1090	MTF TRAINING PROGRAM NUMBER
000191	MIS COURSE CODE (IF APPLICABLE)

EXAMPLE 2 - COURSE NUMBER

AC314/2A656-000002

AC	AIRCRAFT
314	WING DESIGNATION NUMBER
2A656	AFSC NUMBER DESIGNATION
000002	MIS COURSE CODE (IF APPLICABLE)

Attachment 5

SAMPLE FORMAT FOR THE CC/TS

A5.1. CC/TS CCD. The CC/TS is a qualitative course control document that states the course purpose, description, identity, length, security classifications, major items of equipment, and summary of the subject matter covered. The course training standard identifies specific behavior to be attained by each student.

DEPARTMENT OF THE AIR FORCE

COURSE TRAINING NUMBER

WING DESIGNATION

PDS CODE (if applicable)

BASE, STATE AND ZIP CODE

DATE

COURSE CHART AND TRAINING STANDARD

COURSE TITLE

1. **Purpose.** This course has been developed by the (SQUADRON DESIGNATION), and the maintenance training flight in response to requirements of regulatory guidance and/or local need.

2. **Course Description.** This course is designed to provide (AS APPLICABLE TO THE COURSE). Problem solving, interpersonal relationships, and communicative skills are integrated throughout the course. Appropriate STS/JQS/CFETPs, Air Force, and Air Education and Training Command instructions and technical orders are correlated with course content. Students are given the opportunity in the classroom and on the aircraft to apply the skills and knowledge that will enable them to accomplish the required maintenance duties.

3. **Qualitative Requirements.** The proficiency code key.

4. **Attached Tables:**

a. Table I - Course Chart/Training Standard (CC/TS). Provides an outline of course instructional units, training time (hours) per unit, and explanatory remarks concerning course operation. The Course Training Standard identifies specific behavior to be attained by each student for task/knowledge elements included in the course.

b. Table II - Course Support Resources. Identifies host/unit course user furnished equipment and other support requirements.

5. Recommendations. Comments and recommendations are invited concerning the quality of maintenance training programs and graduates. Use this CC/TS as a reference. Address correspondence to: MTF ADDRESS.

MXG/CC Signature Block

Attachment:

Proficiency Code Key

 Supersedes CC/TS: (COURSE NUMBER, DATE)

DISTRIBUTION: Listed on page "A"

Attachment 6**SAMPLE FORMAT FOR THE AF IMT 1768 (STAFF SUMMARY SHEET)**

A6.1. AF IMT 1768 Format. Complete the AF IMT 1768 as follows:

A6.1.1. Coordination Block. Coordinating agencies.

A6.1.2. Subject Block. Review and/or approval of course training materials.

A6.1.3. Summary Block:

A6.1.3.1. Request an SME review the attached CCDs at Tab 1 before obtaining maintenance group commander approval, according to AETCI 21-103, *AETC Military Aircraft Maintenance Training Program*.

A6.1.3.2. The attached CCDs pertain to:

A6.1.3.2.1. Course Title: _____

A6.1.3.2.2. Course Number: _____

A6.1.3.3. The tests and visual information associated with this course have been reviewed by an SME as required by AETCI 21-103.

A6.1.4. Test Number and Title.

A6.1.5. Visual Information Program Number and Title.

A6.1.6. Reviewing SME: _____ Date: _____

A6.1.7. Views of Others. Identify and attach to this package all comments or recommendations to include corrections. If you have any questions concerning this document, please contact the Development Element of the XXX/MOS Maintenance Training Flight (MTF), DSN XXX-XXXX.

A6.1.8. RECOMMENDATION. All coordinating and approving agencies sign and date the staff summary sheet.

MTF Commander or chief
(Signature Block)

1 Tab
Course Control Documents

Attachment 7

SAMPLE FORMAT FOR COURSE THE CC/TS - TABLE I

A7.1. General. The CC/TS provides an outline of course instructional units, training time, and explanatory remarks concerning course operations. See [Table A7.1](#) for information on course material.

COURSE NUMBER: Locally developed (the locally developed course number as identified in **Attachment 4**).

OPR: Enter the organization conducting the training.

COURSE SECURITY CLASSIFICATION: CLASSIFIED or UNCLASSIFIED. Enter the highest security classification of information or material covered in any unit/block of instruction. If the course contains no classified information, enter UNCLASSIFIED.

COURSE LENGTH (8 HOURS/DAY): XX academic days (XX.X hrs). Enter the number of academic days based on the standard 8-hour training day. **Note:** CCDs for a course can be designed to prescribe training for more than one model of equipment where the course provides the same core information, but has different units/blocks of instruction to cover specific equipment available at the training location.

EFFECTIVE DATE: Determined by the development element.

CAC/BATT MONTH: Established by the development element.

ENTRY PREREQUISITES: Enter only mandatory prerequisites. If no course prerequisites are required, then enter none.

INSTRUCTOR-TO-STUDENT RATIO: Academic and practical instructor-to-student ratios serve as a guide to effective class scheduling and planning. Failure to correctly establish these ratios can result in manpower waste, improper student instruction or evaluation, or excessive course lengths. Academic ratio: The optimum number of students one instructor can effectively manage through discussion, demonstration, and teaching activity to cover knowledge-oriented objectives in the prescribed combined CC/TS. Practical ratio: The optimum number of students (group and subgroup) one instructor can effectively manage during progress checks to determine student ability to complete performance-oriented objectives within the allotted time. This ratio may be equal to or smaller than the academic ratio. For courses that contain varying ratios for different performance activities, the practical performance activities should be further identified in the POI.

TECHNICIAN ASSISTANCE: When the instructor-to-student ratio is exceeded for practical application, the assistance of qualified technicians/instructor will be required.

COURSE CONTENT: Start each block/unit of instruction with COURSE MATERIAL - UNCLASSIFIED. If the course presents classified information, enter the highest classification of data in place of UNCLASSIFIED. Enter course orientation and introduction, and time allocated as the first unit of instruction. Enter course critique/assessment, graduation, and time allocated as the last unit of instruction, total hours, and enter any notes.

Attachment 8

SAMPLE FORMAT FOR COURSE SUPPORT RESOURCES - TABLE II

A8.1. Course Support Resources. Table II identifies host or unit course user-furnished equipment and other support requirements.

COURSE SUPPORT RESOURCES - TABLE II

COURSE NUMBER: Course and block title.

1. EQUIPMENT: The development element establishes the format for this listing. Continue on additional pages as necessary to complete this and paragraph 2 below.

2. ADMINISTRATIVE, OPERATIONAL, AND FACILITIES SUPPORT.

- a. At sites where there is an established MTF, support for training (normal, en route, or special) is provided in accordance with AFI 36-2201, *Air Force Training Program*.
- b. When training is conducted at an alternate site (instructors TDY to the site to provide special training, conversion or activation), the host unit for the training provides support such as classroom, housing, unit equipment, etc. The hosting unit will coordinate with requesting unit to identify course support requirements and to obtain confirmation of resources available to support specific training objectives and firm training dates.

SUMMARY OF CHANGES. Summarize Tables I and II changes; for example, addition or deletion of training elements, equipment changes, course length changes, BATT results, etc. Enter a brief summary of major course and/or equipment changes, time blocks, or units. This data in turn correlates with the applicable CC/TS and POI.

Attachment 9**SAMPLE FORMAT FOR POI COVER PAGE**

A9.1. Cover Page. The cover page is the first page of the course control document. It identifies the course number and title.

Instructor Name**(COURSE NUMBER)****PLAN OF INSTRUCTION (POI)****(CENTER COURSE TITLE AS SHOWN ON CC/TS)****(OPR)****(DATE)****FOR TRAINING PURPOSES ONLY**

(Development and Instructor Section Chief)**APPROVAL OF LESSON PLAN****SIGNATURE & DATE****SIGNATURE & DATE**

Attachment 10**SAMPLE FORMAT FOR POI "A" PAGE**

A10.1. POI "A" Page. The POI "A" page identifies the total number of POI pages and distribution. The POI "A" page is normally printed on the reverse side of the POI cover page.

COURSE NUMBER: Enter the same number as on the CC/TS (abbreviate if necessary).

CLASSIFICATION: CLASSIFIED/ UNCLASSIFIED.

**TOTAL NUMBER OF PAGES IN THIS PLAN OF INSTRUCTION IS XX
CONSISTING OF THE FOLLOWING:**

PAGE NUMBER	DATE	CHANGE NUMBER
POI Title Page	1 March 2002	Original
A page (POI Table of Contents)	1 March 2002	Original
I page (POI Cover Memorandum)	1 March 2002	Original
Page 1, POI Block 1, Unit 1	1 March 2002	Original
Page 2, POI Block 1, Unit 2	1 August 2002	Change 1
Page 3, POI Block 2, Unit 1	1 September 2002	Original

This plan of instruction (POI) is based on Combined Course Chart/Training Standard (CC/TS)
Course Number: XXXXX/XXXXXX-XXX, (DATE)

Supersedes POI: COURSE NUMBER, DATE

DISTRIBUTION: Enter applicable course users

"A"

Attachment 11**SAMPLE FORMAT FOR POI "I" PAGE**

A11.1. POI "I" Page. The "I" page is used to identify the course purpose, design and description, student measurement, and objectives. This page is signed by the MXG/CC or to indicate approval of the course.

DEPARTMENT OF THE AIR FORCE	PLAN OF INSTRUCTION
WING DESIGNATOR	COURSE NUMBER
BASE, STATE, ZIP CODE	DATE

COURSE TITLE

1. PURPOSE. This plan of instruction (POI) prescribes the qualitative requirements for the (COURSE TITLE) course. Units of instruction present criterion objectives in a logical teaching sequence. The POI shows duration, correlation with the course training standard, support materials, audiovisual aids and equipment, training, or instructional methods and guidance. This POI was developed in accordance with AFI 36-2201, *Air Force Training Program*, and AETCI 21-103, *AETC Military Aircraft Maintenance Training Program*.

2. COURSE DESIGN/DESCRIPTION. The instructional design for this course is (for example: GROUP PACED, SELF-PACED). This (XX.X)-hour course trains (AS APPLICABLE TO THE COURSE). Problem solving, interpersonal relationships, and communicative skills are integrated throughout the course. Appropriate CFETP, STS/JQS, Air Force, and Air Education and Training Command publications and technical orders correlate with course content.

3. STUDENT MEASUREMENT. Evaluations of criterion objectives are accomplished by performance evaluation (P), written measurement (W), oral questions (O), or a combination thereof. (AS APPLICABLE).

4. OBJECTIVES. All objectives for this course are task/knowledge oriented and develop a skill. The standard of performance on knowledge-oriented objectives is (XX) percent on written measurement unless otherwise indicated. (AS APPLICABLE). CC/TS or TS reference number (enter the CC/TS or TS reference number that satisfies the objective).

MXG/CC Signature Block

Supersedes Plan of Instruction: COURSE NUMBER, DATE

OPR:

DISTRIBUTION: Listed on Page "A"

Attachment 12**SAMPLE FORMAT FOR COURSE ORIENTATION AND INTRODUCTION PAGE**

A12.1. Course Orientation and Introduction Page. Following is a sample format for the course orientation and introduction page:

NAME OF INSTRUCTOR: _____

COURSE TITLE: _____

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE ORIENTATION AND INTRODUCTION TIME: 0.5 HR

SUPPORT MATERIAL AND GUIDANCE

NOTE: Show support materials and guidance for each unit of instruction. Instructional guidance should include any supplemental information not included in the objective or teaching step; for example, need for multiple instructors, when progress checks will be accomplished, etc.

Student Instructional Materials**Audiovisual Aids**

Enter applicable information or none.

Training Equipment

Enter applicable information or none.

Instructional Method

Lecture/discussion.

Brief students on the following subjects: Introduction, course overview, course administration and classroom policies, course completion criteria and prerequisites, student critique/feedback program, safety, security, building orientation, and test compromise.

INSTRUCTIONAL GUIDANCE

Welcome students to the course. Ask students to identify themselves, and briefly state their background. Explain the location of facilities such as the break room and restrooms. Inform students of the importance of the critique program, how it works, and how they can benefit from it. (ANY OTHER INFORMATION AS APPLICABLE TO THE COURSE.)

PAGE _____

COURSE NUMBER

BLOCK

UNIT

DATE

Attachment 13**SAMPLE FORMAT FOR POI UNIT 2 AND FOLLOWING UNITS**

A13.1. POI Unit 2 and Following Units. The Unit 2 and following units page identifies the second unit of instruction as identified on the CC/TS.

PLAN OF INSTRUCTION

NAME OF INSTRUCTOR: COURSE TITLE:

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE CONTENT

UNIT TITLE AS IT APPEARS ON TABLE I OF CC/TS

TIME: 4.0 HRS

EXAMPLE: AFTO IMT 781 symbols and documentation.

SUPPORT MATERIAL AND GUIDANCE

Student Instructional Material

Enter applicable information for the entire unit or none.

Audiovisual Aids

Enter applicable information for the entire unit or none.

Training Equipment

Enter applicable information for the entire unit or none.

Instructional Method

Enter applicable information.

PAGE _____

COURSE NUMBER

BLOCK

UNIT

DATE (as applicable)

Attachment 14

SAMPLE FORMAT FOR POI UNIT 2

A14.1. POI Unit 2. This sample identifies the objective, teaching steps, and instructional guidance for the second unit of instruction as identified on the course chart/training standard.

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE CONTENT (CONTINUED)

ENTER COURSE OBJECTIVE

EXAMPLE: Using applicable TOs, identify symbols used in forms documentation, and their purpose with no instructor assistance.

CC/TS: 2a

PROF: XX

MEAS: X

TIME: X.X HRS

(EXAMPLE: C)

(EXAMPLE: O)

(1) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Discuss symbols used in forms documentation

(a) ENTER ANY TEACHING SUBSTEPS AS APPLICABLE

EXAMPLE: Red X

(b) ENTER ANY TEACHING SUBSTEPS AS APPLICABLE

EXAMPLE: Red /

(2) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Describe the purpose of each symbol.

INSTRUCTIONAL GUIDANCE

(2a) Enter any guidance on how to teach the lesson. Do not reiterate teaching steps.

PAGE _____

COURSE NUMBER

BLOCK

UNIT

DATE (as applicable)

Attachment 15

SAMPLE FORMAT FOR POI UNIT 3

A15.1. POI Unit 3. This sample identifies the objective, teaching steps, and instructional guidance for the third unit of instruction as identified on the course chart/training standard.

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE CONTENT (CONTINUED)

ENTER COURSE OBJECTIVE

EXAMPLE: Using the applicable TOs and AFTO Form 244, document the form with no instructor assistance.

CC/TS: 3

PROF: XX

MEAS: X

TIME: X.X HRS

(1) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Demonstrate documentation of AFTO Form 244.

(2) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Allow students to document AFTO Form 244.

INSTRUCTIONAL GUIDANCE

Enter any guidance on how to teach the lesson. Do not reiterate teaching steps.

PAGE _____

COURSE NUMBER

BLOCK

UNIT

DATE (as applicable)

Attachment 16

SAMPLE FORMAT FOR COURSE CRITIQUE AND GRADUATION PAGE

A16.1. Course Critique and Graduation Page. Use the following example to develop the plan of instruction:

PLAN OF INSTRUCTION

NAME OF INSTRUCTOR: _____ COURSE TITLE: _____

UNCLASSIFIED/CLASSIFIED (as applicable)
COURSE CONTENT

COURSE CRITIQUE AND GRADUATION TIME: 0.5 HR**SUPPORT MATERIAL AND GUIDANCE****Student Instructional Material**

Student critique forms

Audiovisual Aids

None

Training Equipment

None

Instructional Method

Lecture/discussion

Administer the test (as applicable)

Conduct course critique

INSTRUCTIONAL GUIDANCE

Brief students on test administration and test compromise. Explain the need for and importance of the student critique program. Pass out student critique forms to students, and provide instructions for completing the form. Inform students of the option of filling out the form as a group or individual (highly recommended). If possible have another instructor administer the critique.

Conduct graduation

INSTRUCTIONAL GUIDANCE

Issue completed AF Form 1256, *Certificate of Training*, (if applicable). Turn in a signed class roster to the maintenance training flight scheduling section to ensure students who completed the course are updated in MIS through the corresponding course code.

PAGE _____

COURSE NUMBER

BLOCK

UNIT

DATE (as applicable)

Attachment 17**SAMPLE FOR THE TEST COMPROMISE STATEMENT**

A17.1. Warning. The material covered in this test is governed under the guidelines set forth in AETCI 21-103. Compromise of this test material, to include unauthorized possession of test materials or discussion of test content, is a violation of Air Force and Air Education and Training Command instructions and is punishable under the Uniform Code of Military Justice.

A17.2. Test Compromise Situations. The following are potential compromise situations that can occur as a result of actions taken on the part of individuals who develop, handle, administer or participate in the testing program:

A17.2.1. Reviewing, accessing or allowing review of, or access to controlled test material by any individual not specifically authorized.

A17.2.2. Having an oral or written discussion concerning contents of test material with an unauthorized person.

A17.2.3. Bringing any unauthorized material into the testing room.

A17.2.4. Unauthorized reproduction, copying, or faxing of test material.

A17.2.5. Removing test material from the examination room without authorization.

A17.2.6. Being unable to account for the location of testing materials.

A17.2.7. Storing test materials improperly.

A17.2.8. Taking or possessing materials without authorization.

A17.3. Test Compromise Actions. Take the following actions in the event of a test compromise:

A17.3.1. The instructor will suspend all testing of the affected test and gain positive control of all affected test materials.

A17.3.2. Development section will perform a preliminary assessment and report recommendations to the section chief.

A17.3.3. MTF commander or chief will evaluate the preliminary assessment results, and report findings to the MOS/CC.

Attachment 18**SAMPLE LESSON PLAN FORMAT - INTRODUCTION**

A18.1. Introduction. This page identifies the lesson plan format (introduction) when personalizing the instructor POI.

LESSON PLAN INTRODUCTION

COURSE NUMBER

LESSON INTRODUCTION

ATTENTION: This step is used to alert the student that the instructor is ready to begin the lesson, and to gain the students' attention.

OVERVIEW: Provides an explanation of what to expect during the lesson. It normally includes an explanation of the objectives and the major teaching steps. The overview provides a roadmap to help the student follow the lesson.

MOTIVATION: This step is used to gain the students' interest in the training. This step may be combined with the attention step. The instructor should explain why it is important for the student to learn the information that is presented during the training session.

TRANSITION: This step allows the instructor to move from the introduction to the body of the instruction. It is also used to focus the students' attention on the first major teaching step.

Sample Lesson Plan - Introduction (personalization).

PAGE _____

COURSE NUMBER

BLOCK

UNIT

DATE (as applicable)

Attachment 19**SAMPLE LESSON PLAN FORMAT – BODY**

A19.1. Body. This page identifies the lesson plan format (body) when personalizing the instructor POI.

LESSON PLAN BODY**PRESENTATION/EXPLANATION:*****EXAMPLE:***

Body. The body identifies the objective, teaching steps, and substeps. For longer blocks/units of instruction, use interim summaries as needed.

Symbols. Refer to slide 1. Explain that each symbol indicates varying degrees of severity of writeups. Stress importance of using the correct symbol.

Transition. Used to tie-up one thought and proceed into another.

EXAMPLE: Now that we know what symbols are used in documentation, let's continue with some actual documentation. Any questions?

Documentation. Use slide 2 and fill it in on the board while explaining procedures to students. Ask questions while completing the form.

Question. What symbol would be used to indicate a writeup that would ground the aircraft?

NOTE: Instructional guidance is not required but may be used if the instructor requires additional appropriate information.

Sample lesson plan: body (personalization).

Application/performance: none or as applicable.

Evaluation: none or as applicable.

PAGE _____

COURSE NUMBER

BLOCK

UNIT

DATE (as applicable)

Attachment 20**SAMPLE FOR THE LESSON PLAN FORMAT (CONCLUSION)**

A20.1. Lesson Plan Format. This page identifies the lesson plan format (Conclusion) when personalizing the instructor POI. Sample format below:

LESSON PLAN CONCLUSION

CONCLUSION: After the last teaching step of each objective, a summary of the information presented is performed. The conclusion should contain a summary, remotivation, and closure.

SUMMARY: The summary is used to remind the student of the objective and the major teaching steps of the lesson. This step allows the trainee to review the information learned and clear up any misconception. The summary also reemphasizes safety and the use of TOs, if applicable, and reiterates the importance of understanding material presented and summarize key points. Any other items deemed appropriate by the instructor may be included. It will not introduce new material.

REMOTIVATION: This step allows the trainer to remind the trainee why it is important to remember what was taught and how the information applies to them.

CLOSURE: The closure statement is to let the trainee know the lesson is over.

NOTE: Do not use the conclusion to introduce new information.

Sample Lesson Plan - Conclusion (Personalization).